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AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003								
	NEWS HOURS				STN Operating Hours Plus Help Desk Availability			
	NEWS INTER			General Internet Information				
	NEWS LOGIN							
	NEWS PHONE			Direct Dial and Telecommunication Network Access to STN				
NEWS WWW CAS World Wide Web Site (general information)								

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 06:47:41 ON 01 OCT 2003

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=> file reg
COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
0.21
0.21
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FILE 'REGISTRY' ENTERED AT 06:47:47 ON 01 OCT 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 29 SEP 2003 HIGHEST RN 595542-94-2 DICTIONARY FILE UPDATES: 29 SEP 2003 HIGHEST RN 595542-94-2

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

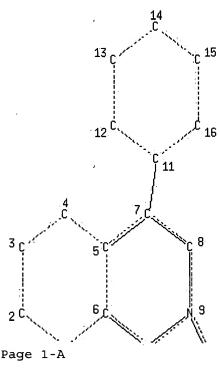
Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



Page 2-A NODE ATTRIBUTES:

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42 ANSWERS

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DEFAULT MLEVEL IS ATOM
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DEFAULT ECLEVEL IS LIMITED
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GRAPH ATTRIBUTES:

RSPEC 11

NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

=> s 11

SAMPLE SEARCH INITIATED 06:49:43 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 2851 TO ITERATE

35.1% PROCESSED 1000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 53818 TO 60222

PROJECTED ANSWERS: 1738 TO 3050

42 SEA SSS SAM L1 L2

L3STRUCTURE UPLOADED

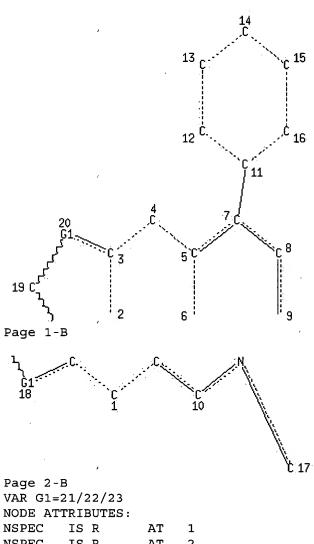
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L3 HAS NO ANSWERS

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Page 1-A



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GRAPH ATTRIBUTES:

IS CLASS

DEFAULT ECLEVEL IS LIMITED

RSPEC 11

MLEVEL

NUMBER OF NODES IS 23

STEREO ATTRIBUTES: NONE

=> s 13

SAMPLE SEARCH INITIATED 06:51:40 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 660 TO ITERATE

660 ITERATIONS 100.0% PROCESSED

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE** BATCH **COMPLETE**

PROJECTED ITERATIONS: 11659 TO 14741 PROJECTED ANSWERS: 0 TO

0 SEA SSS SAM L3

=> s 13 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 147.75 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y FULL SEARCH INITIATED 06:51:44 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 13126 TO ITERATE

100.0% PROCESSED 13126 ITERATIONS SEARCH TIME: 00.00.01

5 ANSWERS

5 SEA SSS FUL L3

=> file hcaplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

150.55 150.76 FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 06:51:49 ON 01 OCT 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 1 Oct 2003 VOL 139 ISS 14 FILE LAST UPDATED: 30 Sep 2003 (20030930/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 15

5 L5 L6

=> d 16, ibib abs fhitstr, 1-5

L6 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

Full Citing Text References

ACCESSION NUMBER:

1996:613920 HCAPLUS

DOCUMENT NUMBER:

125:275613

TITLE:

A convenient synthesis of 1,2,3,4-tetrahydro-4-

arylisoquinolin-4-ol derivatives

Coskun, Necdet; Sumengen, Dogan

CORPORATE SOURCE:

Department Chemistry, Uludag University, Bursa, 16059,

Turk.

SOURCE:

Chimica Acta Turcica (1996), 24(2), 151-154

CODEN: CATUA9; ISSN: 0379-5896

PUBLISHER:

AUTHOR (S):

Istanbul Universitesi, Muhendislik Fakultesi

Dekanligi, Kimya Muhendisligi Bolumu

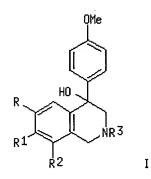
DOCUMENT TYPE:

Journal

LANGUAGE:

English

GΙ



AB N-Benzylaminoacetophenones were obtained by reductive amination of arom. aldehydes with amines in the presence of KBH4 and alkylation with $\alpha\text{-haloacetophenones}$ using K2CO3 as a base. The title compds. I [R = R1 = OMe, R2 = H, R3 = Me, CH2Ph; RR1 = OCH2O, R2 = H, R3 = Me; R = H, R1 = R2 = OMe, R3 = Me] were obtained by cyclizing the benzylaminoacetophenones with 95% H2SO4 in methylene chloride.

IT 182575-15-1P

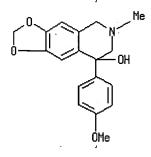
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of arylisoquinolinols)

RN <u>182575-15-1</u> HCAPLUS

CN 1,3-Dioxolo[4,5-g]isoquinolin-8-ol, 5,6,7,8-tetrahydro-8-(4-methoxyphenyl)-6-methyl-, (2Z)-2-butenedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN <u>182575-14-0</u> CMF C18 H19 N O4



CM

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN L₆

Citing Full <u>References</u> Text

ACCESSION NUMBER:

1990:497422 HCAPLUS

DOCUMENT NUMBER:

113:97422

TITLE:

A new synthesis of 1,2,3,4-tetrahydro-2-methyl-4-

phenylisoquinolines

AUTHOR (S):

Venkov, A.; Vodenicharov, D.

CORPORATE SOURCE:

Dep. Chem., Univ. Plovdiv, Plovdiv, 4000, Bulg.

SOURCE:

Synthesis (1990), (3), 253-5 CODEN: SYNTBF; ISSN: 0039-7881

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 113:97422

1,2,3,4-Tetrahydro-2-methyl-4-phenylisoquinolines I (R1 = R2 = OMe, R3 = AΒ OMe; R1 = OMe, R2 = R3 = H; R1 = R2 = H, R3 = H, NH2; R1R2 = OCH2O, R3 = HH) are obtained from arom. aldehydes R1R2R3C6H2CHO, MeNH2, and α -haloacetophenones in the presence of NaBH4 followed by cyclization with H2SO4 and Zn in MeOH.

IT 128942-67-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN128942-67-6 HCAPLUS

1,3-Dioxolo[4,5-g]isoquinoline, 5,6,7,8-tetrahydro-6-methyl-8-phenyl-CN

(9CI) (CA INDEX NAME)

L6 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

Full Citing Text References

ACCESSION NUMBER: 1986:406658 HCAPLUS

DOCUMENT NUMBER: 105:6658

TITLE: , Studies on tetrahydroisoquinolines. XXV. A synthesis

of 4-aryl-1,2,3,4-tetrahydroisoquinolines; total

synthesis of (\pm) -cherylline

AUTHOR(S): Hara, Hiroshi; Shirai, Ryuichi; Hoshino, Osamu;

Umezawa, Bunsuke

CORPORATE SOURCE: Fac. Pharm. Sci., Sci. Univ. Tokyo, Tokyo, 162, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1985), 33(8),

3107-12

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 105:6658

GI

AB Four 4-phenyl-1,2,3,4-tetrahydroisoquinolines I (R = H, R1 = H0, R2 = Me0; R = H, R1 = Me0, R2 = H0; R = H, R1R2 = OCH2O; R = H0, R1 = Me0, R2 = H) were prepd. from two simple synthons, styrene oxide and the corresponding benzylamines, via the β -hydroxyphenethylamines in high yield. On the other hand, β -methoxyphenethyl methanesulfonate, obtained from 4-benzyloxystyrene oxide, was coupled with a benzylamine to give the N-benzyl- β -methoxyphenethylamine II. A facile total synthesis of (\pm)-cherylline (III) was accomplished by acid treatment of II.

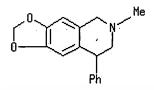
4'-O-Methylcherylline was also synthesized through the same pathway.

IT 128942-67-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

RN 128942-67-6 HCAPLUS

CN 1,3-Dioxolo[4,5-g]isoquinoline, 5,6,7,8-tetrahydro-6-methyl-8-phenyl-(9CI) (CA INDEX NAME)



L6 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

Full Citing Text References

ACCESSION NUMBER:

1984:85962 HCAPLUS

DOCUMENT NUMBER:

100:85962

TITLE:

A facile synthesis of 4-aryl-1,2,3,4-

tetrahydroisoquinolines: a total synthesis of

(±)-cherylline

AUTHOR(S):

Hara, Hiroshi; Shirai, Ryuichi; Hoshino, Osamu;

Umezawa, Bunsuke

CORPORATE SOURCE:

Fac. Pharm. Sci., Univ. Tokyo, Tokyo, 162, Japan

SOURCE:

Heterocycles (1983), 20(10), 1945-50 CODEN: HTCYAM; ISSN: 0385-5414

DOCUMENT TYPE:

Journal

LANGUAGE:

English

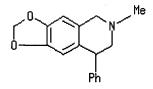
GI

Cherylline (I, R = H, R1 = R3 = H0, R2 = Me0) and the related isoquinolines I [R, R1, R2, R3 = H,H0,Me0,H; H0,Me0,H,H; H,Me0,H0,H; H,H0,Me0,Me0; H,OCH20 (R2R3),H] were prepd. by cyclization of (benzylamino)phenylethanols II by treatment with acid. II were prepd. by reaction of benzylamines and styrene oxides.

IT 128942-71-2P

RN <u>128942-71-2</u> HCAPLUS

CN 1,3-Dioxolo[4,5-g]isoquinoline, 5,6,7,8-tetrahydro-6-methyl-8-phenyl-, hydrochloride (9CI) (CA INDEX NAME)



HC1

L6 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

Full Citing Text References

ACCESSION NUMBER:

1975:410538 HCAPLUS

DOCUMENT NUMBER:

83:10538

TITLE:

Syntheses of heterocyclic compounds. DXCI. Total synthesis of (+-)-cherylline and corgoine through

quinonoid intermediates

AUTHOR(S):

Kametani, Tetsuji; Takahashi, Keiichi; Chu Van Loc

Pharm. Inst., Tohoku Univ., Sendai, Japan

SOURCE:

CORPORATE SOURCE:

Tetrahedron (1975), 31(3), 235-8 CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE:

Journal

LANGUAGE:

English

GI For diagram(s), see printed CA Issue.

AB 3,4-(PhCH2O) (MeO)C6H3CH2NHMe at 100° for 3.5 hr with

4-PhCH2OC6H4CH(OMe)CH2Br gave 3,4-(PhCH2O)(MeO)C6H3CH2NMeCH2CH(OMe)C6H4OCH

2Ph-4 which on cyclization followed by debenzylation gave

(±)-cherylline (I). Cherylline analogs II and III were prepd.

similarly. Heating p-HOC6H4CH2OH with the isoquinoline IV in a current of

N gave 44% corgoine (V).

IT 55708-71-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

RN 55708-71-9 HCAPLUS

CN Phenol, 4-(5,6,7,8-tetrahydro-6-methyl-1,3-dioxolo[4,5-g]isoquinolin-8-yl)-(9CI). (CA INDEX NAME)

='> L7

STRUCTURE UPLOADED

=> file reg'

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY 29.44

SESSION 180.20 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE ENTRY

TOTAL SESSION

CA SUBSCRIBER PRICE

-3.26

-3.26

FILE 'REGISTRY' ENTERED AT 06:53:19 ON 01 OCT 2003
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STRUCTURE FILE UPDATES: 29 SEP 2003 HIGHEST RN 595542-94-2 DICTIONARY FILE UPDATES: 29 SEP 2003 HIGHEST RN 595542-94-2

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

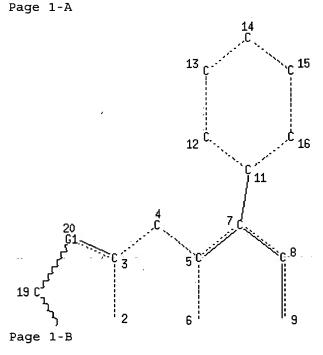
=> L8

STRUCTURE UPLOADED

=> d 18 L8 HAS NO ANSWERS

L8 'STR

0 21 S 22 N 23 C 24



Page 2-B

VAR G1=21/22/23/24

NODE ATTRIBUTES:

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GRAPH ATTRIBUTES:

RSPEC 11

NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

=> s 18

SAMPLE SEARCH INITIATED 06:53:34 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -354 TO ITERATE

100.0% PROCESSED

354 ITERATIONS

3 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: - 5952 TO PROJECTED ANSWERS:

- 8208

3 TO 163

L9

3 SEA SSS SAM L8

=> s 18 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 147.75 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

FULL SEARCH INITIATED 06:53:39 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 7315 TO ITERATE

7315 ITERATIONS 31 ANSWERS 100.0% PROCESSED

SEARCH TIME: 00.00.01

' 31 SEA SSS FUL L8 L10

=> file hcaplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 148.15 328.35

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION 0.00 -3.26 CA SUBSCRIBER PRICE

FILE 'HCAPLUS' ENTERED AT 06:53:43 ON 01 OCT 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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FILE COVERS 1907 - 1 Oct 2003 VOL 139 ISS 14 FILE LAST UPDATED: 30 Sep 2003 (20030930/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 110

L11 6 L10

=> d his

L8

(FILE 'HOME' ENTERED AT 06:47:41 ON 01 OCT 2003)

FILE 'REGISTRY' ENTERED AT 06:47:47 ON 01 OCT 2003

STRUCTURE UPLOADED L1

L242 S L1

STRUCTURE UPLOADED L3

L40 S L3

5-S L3 FULL

FILE 'HCAPLUS' ENTERED AT 06:51:49 ON 01 OCT 2003

5 S L5

L6 L7 STRUCTURE UPLOADED

> FILE 'REGISTRY' ENTERED AT 06:53:19 ON 01 OCT 2003 STRUCTURE UPLOADED

L9 3 S L8 L10 31 S L8 FULL

FILE 'HCAPLUS' ENTERED AT 06:53:43 ON 01 OCT 2003

L11 6 S L10

=> s 111 not 16

L12 1 L11 NOT L6

=> d 12, ibib abs fhitstr, 1

1 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE The answer numbers requested are not in the answer set.

ENTER ANSWER NUMBER OR RANGE (1):0

NUMBERS IN RANGE MUST BE GREATER THAN ZERO.

An answer number must be a positive number.

ENTER ANSWER NUMBER OR RANGE (1):end

=> d l12, ibib abs fhitstr, 1

L12 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS on STN

Full Citing Text References

ACCESSION NUMBER:

2002:51467 HCAPLUS

DOCUMENT NUMBER:

136:118393

TITLE:

Preparation and use of furan-fused-4-phenyl

substituted tetrahydroisoguinolines for treatment of

attention deficit hyperactivity disorder (ADHD)

INVENTOR(S):

Beck, James P.; Pechulis, Anthony D.; Harms, Arthur E. Dupont Pharmaceuticals Company, USA

PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 116 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO.
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PRIORITY APPLN. INFO.:
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OTHER SOURCE(S):

MARPAT 136:118393

GΙ

$$R^{4}$$
 R^{5}
 R^{6}
 R^{7}
 R^{7}
 R^{1}
 R^{2}
 R^{3}

AB Title compds. I [R1 = alk(en/yn)yl, cycloalkyl, 5-cycloalkylalkyl and benzyl, each of which is optionally substituted with 1 to 3 substituents; R2 = H, alk(en/yn)yl, cycloalkyl, cycloalkylalkyl and haloalkyl; R3 = H, halo, alkyl, haloalkyl and cycloalkyl, wherein alkyl, haloalkyl and cycloalkyl are optionally substituted with 1 to 3 substituents selected from alkoxy and amino; R4-6 = H, halo, alkoxy, NO2, amino, amido, ureido, S(0)n, CN, acyl, carboxy, carboxamide, alk(en/yn)yl, cycloalkyl and cycloalkylalkyl; alternatively R5-6 = O-alkyl-O; R7 = H, halo and alkoxy; X = 0, NH (and substituted derivs.) and S; n = 0 - 2] with some provisos, were prepd. E.g., 7-formylbenzofuran was converted to the corresponding methylamino-Me deriv. (MeOH, MeNH2, NaBH4), alkylated with p-chlorophenacyl bromide (CH2Cl2, Et3N) and reduced to the amino alc. (CH2Cl2, NaBH4, 5 h, $0^{\circ} \rightarrow \text{room temp.}$). This intermediate was treated dropwise with MsOH (CH2Cl2, 0°C → reflux, overnight) to give II as a yellow oil (18% overall yield). synthetic examples were provided. Compds. I are selective neurotransmitter receptor binding ligands (no data). I are useful in the treatment of attention-deficit hyperactivity disorder.

IT 389845-75-4P

RL: BYP (Byproduct); PREP (Preparation)
 (byproduct; prepn. and use of furan-fused-4-Ph substituted
 tetrahydroisoquinolines for treatment of attention deficit
 hyperactivity disorder (ADHD))

RN 389845-75-4 HCAPLUS

CN Furo[3,2-g]isoquinoline, 5,6,7,8-tetrahydro-7-methyl-5-phenyl- (9CI) (CA INDEX NAME)

=> file reg

COST IN U.S. DOLLARS	SINCE FILE	_ TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	9.05	337.40
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
, and the second se	ENTRY	SESSION
CA SUBSCRIBER PRICE	-0.65	-3.91

FILE 'REGISTRY' ENTERED AT 06:54:59 ON 01 OCT 2003
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STRUCTURE FILE UPDATES: 29 SEP 2003 HIGHEST RN 595542-94-2 DICTIONARY FILE UPDATES: 29 SEP 2003 HIGHEST RN 595542-94-2

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

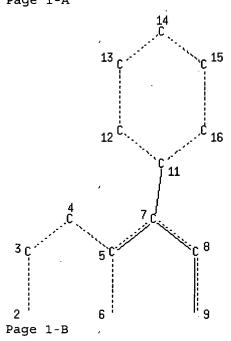
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> L13 STRÚCTURE UPLOADED

=> d 113 L13 HAS NO ANSWERS L13 STR

0 21 S 22 N 23 C 24 Page 1-A



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10
                   C 17
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Page 2-B

VAR G1=21/22/23/24

NODE ATTRIBUTES:

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GRAPH ATTRIBUTES:

RSPEC 11

NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

=> s 113

SAMPLE SEARCH INITIATED 06:56:43 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 263 TO ITERATE

100.0% PROCESSED 263 ITERATIONS 8 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

> BATCH **COMPLETE**

-- 4287 ТО PROJECTED-ITERATIONS:-- - 6233--PROJECTED ANSWERS: OT 8 329

L14 8 SEA SSS SAM L13

=> s 113 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY! IS 147.75 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

FULL SEARCH INITIATED 06:56:47 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 5253 TO ITERATE

100.0% PROCESSED 5253 ITERATIONS 137 ANSWERS

SEARCH TIME: 00.00.01

L15 137 SEA SSS FUL L13

=> file hcaplus

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST 148.95 486.35

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL

ENTRY SESSION

CA SUBSCRIBER PRICE 0.00 -3.91

FILE 'HCAPLUS' ENTERED AT 06:56:51 ON 01 OCT 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 1 Oct 2003 VOL 139 ISS 14 FILE LAST UPDATED: 30 Sep 2003 (20030930/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 115

L16 2 L15

=> d l16, ibib abs fhitstr, 1-2

L16 ANSWER '1 OF 2 HCAPLUS COPYRIGHT 2003 ACS on STN

Full Citing Text References

ACCESSION NUMBER: 2002:51467 HCAPLUS

DOCUMENT NUMBER: 136:118393

TITLE: Preparation and use of furan-fused-4-phenyl

substituted tetrahydroisoquinolines for treatment of attention deficit hyperactivity-disorder- (ADHD)

INVENTOR(S): Beck, James P.; Pechulis, Anthony D.; Harms, Arthur E.

PATENT ASSIGNEE(S): Dupont Pharmaceuticals Company, USA

SOURCE: PCT Int. Appl., 116 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GI

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PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                                            DATE
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                      Α3
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     WO 2002004455
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     EP 1299393
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PRIORITY APPLN. INFO.:
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OTHER SOURCE(S):
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 \mathbb{R}^{1}
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AB Title compds. I [R1 = alk(en/yn)yl, cycloalkyl, 5-cycloalkylalkyl andbenzyl, each of which is optionally substituted with 1 to 3 substituents; R2 = H, alk(en/yn)yl, cycloalkyl, cycloalkylalkyl and haloalkyl; R3 = H, halo, alkyl, haloalkyl and cycloalkyl, wherein alkyl, haloalkyl and cycloalkyl are optionally substituted with 1 to 3 substituents selected from alkoxy and amino; R4-6 = H, halo, alkoxy, NO2, amino, amido, ureido, S(0)n, CN, acyl, carboxy, carboxamide, alk(en/yn)yl, cycloalkyl and cycloalkylalkyl; alternatively R5-6 = O-alkyl-O; R7 = H, halo and alkoxy; X = 0, NH (and substituted derivs.) and S; n = 0 - 2] with some provisos, were prepd. E.g., 7-formylbenzofuran was converted to the corresponding methylamino-Me deriv. (MeOH, MeNH2, NaBH4), alkylated with p-chlorophenacyl bromide (CH2Cl2, Et3N) and reduced to the amino alc. (CH2Cl2, NaBH4, 5 h, 0° \rightarrow room temp.). This intermediate was treated dropwise with MsOH (CH2Cl2, 0°C → reflux, overnight) to give II as a yellow oil (18% overall yield). synthetic examples were provided. Compds. I are selective neurotransmitter receptor binding ligands (no data). I are useful in the treatment of attention-deficit hyperactivity disorder.

IT 389844-44-4P

The title compds. (I; R = H, alkyl aminoalkyl, heterocyclylalkyl; RR1 = O, OCH2CH2O, SCH2CH2S; RR3 = atoms required to complete a 6-membered N-contg. ring; R1R2 = H, bond; R2R3 = O; R2R4 = bond,; R4 = H, alkyl, iminomethyl, heterocyclyl; R5 = H, alkyl; R6 = halo) were prepd. Thus, 2-H2NC6H4CH2NMeCH2CHPhOH was condensed with Cl3CCH(OH)2 and HONH2.HCl to give 91% 2-HON:CHCONHC6H4CH2NMeCH2CHPhOH. This was cyclized by stirring at 35° in concd. H2SO4 to give 90% I (RR1 = R2R3 = O, R4 = R6 = H, R5 = Me). This was treated with LiAlH4 in Et2O-THF at room temp. to give 30% I (R = R3 = R4 = R6 = H, R1R2 = bond, R5 = Me) (II). II inhibited tetrabenazine-induced ptosis in mice with an ED50 of 0.3 mg/kg i.p.

IT 98159-29-6P

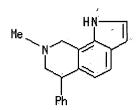
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. and antidepressant activity of)

RN 98159-29-6 HCAPLUS

CN TH-Pyrrolo[3,2-h]isoquinoline, 6,7,8,9-tetrahydro-8-methyl-6-phenyl-, (2Z)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN <u>98159-28-5</u> CMF C18 H18 N2



CM 2

CRN <u>110-16-7</u> CMF C4 H4 O4

Double bond geometry as shown.

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 13.58 499.93

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE ENTRY TOTAL SESSION

CA SUBSCRIBER PRICE

-1.30

-5.21

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STRUCTURE FILE UPDATES: 29 SEP 2003 HIGHEST RN 595542-94-2 DICTIONARY FILE UPDATES: 29 SEP 2003 HIGHEST RN 595542-94-2

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

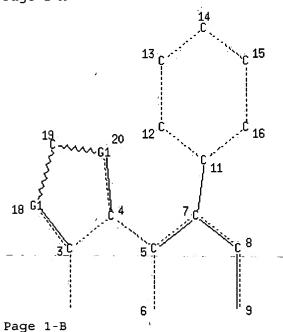
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> L17 STRUCTURE UPLOADED

=> **d 117** / L17 HAS NO ANSWERS L17 STR

0 21 S 22 N 23 C 24 Page 1-A



Page 2-B

VAR G1=21/22/23/24

NODE ATTRIBUTES: NSPEC IS R ATIS R ΑT NSPEC IS R AT NSPEC 3 IS R ATNSPEC NSPEC IS R ΑT NSPEC IS R ΑT 6 7 IS R AΤ NSPEC NSPEC IS R AΤ NSPEC IS R AT IS R 10 ATNSPEC NSPEC IS R AΤ 11 IS R AT **NSPEC** NSPEC IS R ΑT 13 NSPEC IS R AT14 IS R AT NSPEC IS Ŕ ΑT NSPEC 16 NSPEC IS C ΑT 17 NSPEC IS R AΤ 18 NSPEC IS R AT19

GRAPH ATTRIBUTES:

IS R

DEFAULT MLEVEL IS ATOM MLEVEL IS CLASS AT DEFAULT ECLEVEL IS LIMITED

RSPEC 11

NSPEC

NUMBER OF NODES IS

STEREO ATTRIBUTES: NONE

=> s 117

SAMPLE SEARCH INITIATED 06:59:55 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -330 TO ITERATE

100.0% PROCESSED 330 ITERATIONS

ΑT

1 ANSWERS

SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE **COMPLETE** BATCH **COMPLETE**

76.8.9 5511 TO PROJECTED ITERATIONS:

80 PROJECTED ANSWERS: 1 TO

L18 1 SEA SSS SAM L17

=> s 117 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 147.75 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N or END:y

FULL SEARCH INITIATED 07:00:02 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 6837 TO ITERATE

100.0% PROCESSED 6837 ITERATIONS 22 ANSWERS

SEARCH TIME: 00.00.01

L19 22 SEA SSS FUL L17

=> file hcaplus

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST 148.95 648.88

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL

ENTRY SESSION

CA SUBSCRIBER PRICE 0.00 -5.21

FILE 'HCAPLUS' ENTERED AT 07:00:08 ON 01 OCT 2003
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FILE COVERS 1907 - 1 Oct 2003 VOL 139 ISS 14 FILE LAST UPDATED: 30 Sep 2003 (20030930/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 119

L20 1 L19

=> d 120, ibib abs fhitstr, 1

L20 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS on STN

Text References

ACCESSION NUMBER: 2002:51467 HCAPLUS

DOCUMENT NUMBER: 136:118393

TITLE: Preparation and use of furan-fused-4-phenyl

substituted tetrahydroisoquinolines for treatment of

attention deficit hyperactivity disorder (ADHD)

INVENTOR(S): Beck, James P.; Pechulis, Anthony D.; Harms, Arthur E.

PATENT ASSIGNEE(S): Dupont Pharmaceuticals Company, USA

SOURCE: PCT Int. Appl., 116 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

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                                           APPLICATION NO.
                                                             DATE
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                                           WO 2001-US21818
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     WO 2002004455
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OTHER SOURCE(S):
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$$R^4$$
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 R^6
 R^7
 R^7
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 R^7
 R^9
 R^9

AB Title compds. I [R1 = alk(en/yn)yl, cycloalkyl, 5-cycloalkylalkyl and benzyl, each of which is optionally substituted with 1 to 3 substituents; R2 = H, alk(en/yn)yl, cycloalkyl, cycloalkylalkyl and haloalkyl; R3 = H, halo, alkyl, haloalkyl and cycloalkyl, wherein alkyl, haloalkyl and cycloalkyl are optionally substituted with 1 to 3 substituents selected from alkoxy and amino; R4-6 = H, halo, alkoxy, NO2, amino, amido, ureido, S(O)n, CN, acyl, carboxy, carboxamide, alk(en/yn)yl, cycloalkyl and cycloalkylalkyl; alternatively R5-6 = O-alkyl-O; R7 = H, halo and alkoxy; X = 0, NH (and substituted derivs.) and S; n = 0 - 2] with some provisos, were prepd. E.g., 7-formylbenzofuran was converted to the corresponding methylamino-Me deriv. (MeOH, MeNH2, NaBH4), alkylated with p-chlorophenacyl bromide (CH2Cl2, Et3N) and reduced to the amino alc. (CH2Cl2, NaBH4, 5 h, $0^{\circ} \rightarrow \text{room temp.}$). This intermediate was treated dropwise with MsOH (CH2Cl2, 0°C → reflux, overnight) to give II as a yellow oil (18% overall yield). Over 150 synthetic examples were provided. Compds. I are selective neurotransmitter receptor binding ligands (no data). I are useful in the treatment of attention-deficit hyperactivity disorder.

IT 389845-09-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug; prepn. and use of furan-fused-4-Ph substituted tetrahydroisoquinolines for treatment of attention deficit hyperactivity disorder (ADHD))

RN 389845-09-4 HCAPLUS

Furo[2,3-f]isoquinoline, 6,7,8,9-tetrahydro-7-methyl-9-phenyl-, hydrochloride (9CI) (CA INDEX NAME)

CN

HCT

=> file caold

CA SUBSCRIBER PRICE

COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION

-0.65

-5.86

FILE 'CAOLD' ENTERED AT 07:00:23 ON 01 OCT 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907-1966 FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter <u>HELP FIRST</u> for more information.

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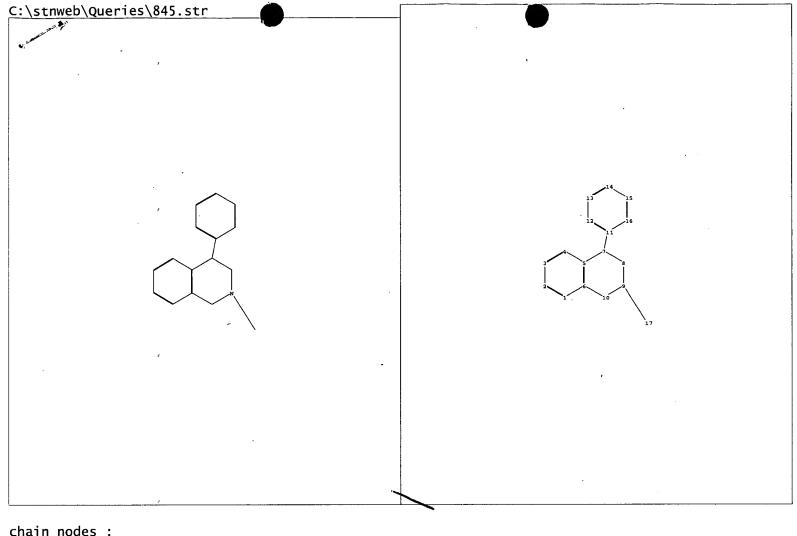
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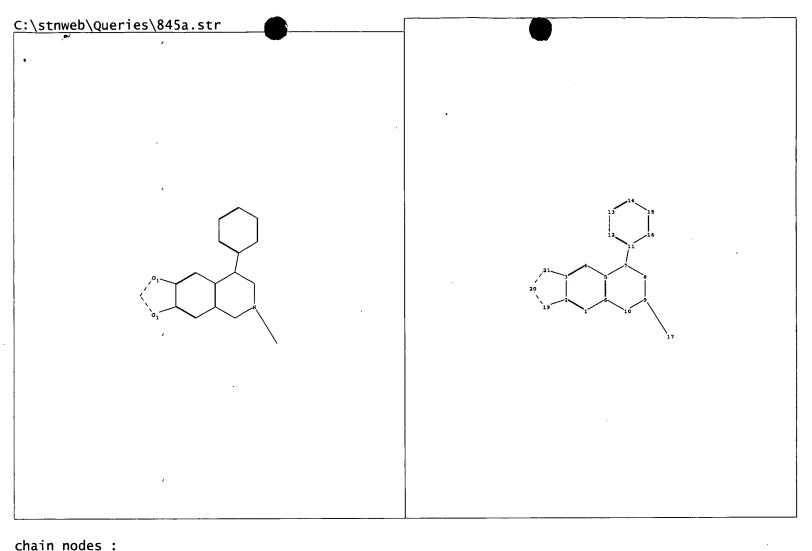
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ring bonds :
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   15-16
exact/norm bonds :
   5-7 6-10 7-8 8-9 9-10 9-17
exact bonds:
   7-11
normalized bonds:
1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 isolated ring systems:
   containing 11:
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   12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS
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Tring nodes:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 19 20 21

Chain bonds:

7-11 9-17

ring bonds:

1-2 1-6 2-3 2-19 3-4 3-21 4-5 5-6 5-7 6-10 7-8 8-9 9-10 11-12 11-16 12-13 13-14 14-15 15-16 19-20 20-21

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exact bonds:

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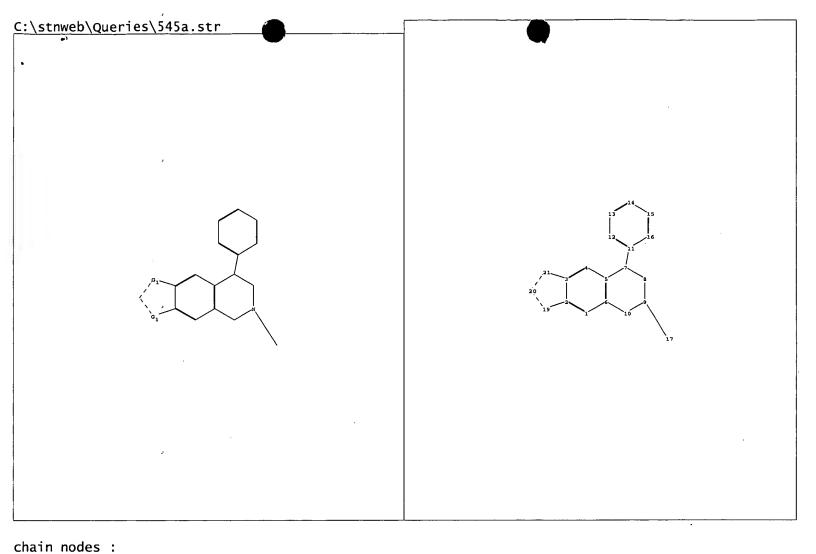
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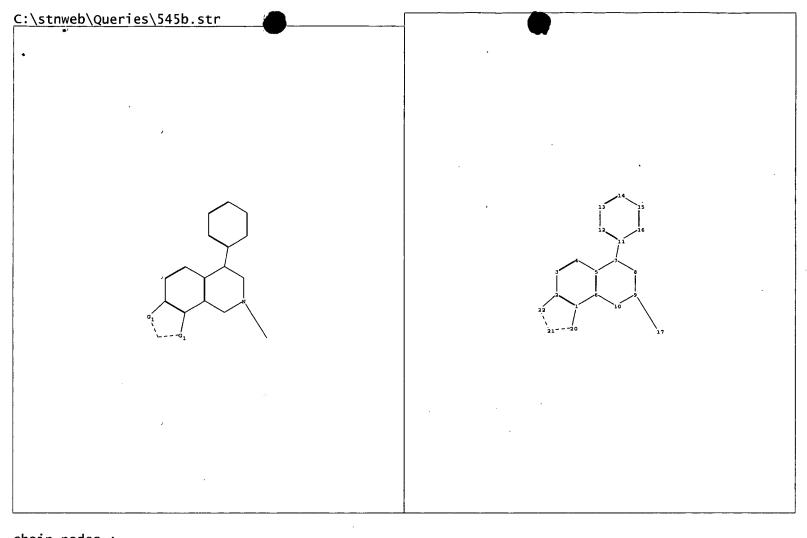
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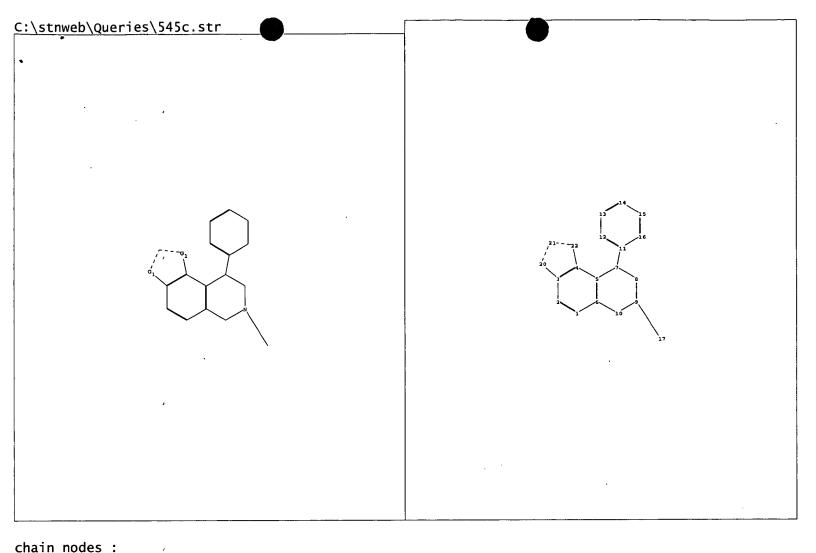


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ring nodes:
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exact bonds:
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ring nodes:
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Chain bonds:
7-11 9-17
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